

#### **Genetics Research Training Program**

The Genetics Research Training Program is designed for those pursuing research careers in genetics. It covers experimental design, advanced data analysis, genome editing, and molecular techniques, equipping participants with skills for conducting independent genetic research.

Note: Below modules are designed keeping high end industrial professionals into consideration. Please refer individual protocols below for affordable prices.

### **Experimental Design in Genetics**

Fee: Rs Designing genetic experiments with control groups/-

- 1. Randomization and replication in genetic studies
- 2. Formulating hypotheses and setting research objectives
- 3. Ethical considerations in genetic research
- 4. Documentation and record-keeping in genetic experiments

# Advanced Data Analysis for Genetic Research

Fee: Rs Statistical analysis methods for genetic data/-

- 1. Applying bioinformatics tools for large datasets
- 2. Genetic linkage analysis and association studies
- 3. Quantitative trait loci (QTL) mapping
- 4. Visualizing genetic data using advanced software

### **Genome Editing Techniques**

Fee: Rs CRISPR-Cas9 and TALENs for targeted gene editing/-

- 1. Optimization of gene editing protocols for accuracy
- 2. Screening and validating edited organisms
- 3. Assessing off-target effects and efficiency
- 4. Applications of genome editing in genetic research

## Functional Genomics and Gene Function Analysis

Fee: Rs RNA interference (RNAi) techniques for gene silencing/-

- 1. Protein expression analysis and quantification
- 2. Mutagenesis and knockout models in functional studies
- 3. Introduction to transgenic models in genetics research
- 4. Case studies on gene function and pathway analysis

# Population Genetics and Evolutionary Analysis

Fee: Rs Analysis of genetic diversity in populations/-

- 1. Using phylogenetic tools for evolutionary studies
- 2. Genetic drift, selection, and migration analysis

- 3. Hardy-Weinberg equilibrium and population structure
- 4. Applications of population genetics in conservation

## Individual Protocols Under Genetics Research Training Program

- 1. Designing genetic experiments with control groups | Fee: Rs Contact Us /-
- 2. Randomization and replication in genetic studies | Fee: Rs Contact Us /-
- 3. Formulating hypotheses and setting research objectives | Fee: Rs Contact Us /-
- 4. Ethical considerations in genetic research | Fee: Rs Contact Us /-
- 5. Documentation and record-keeping in genetic experiments | Fee: Rs Contact Us /-
- 6. Statistical analysis methods for genetic data | Fee: Rs Contact Us /-
- 7. Applying bioinformatics tools for large datasets | Fee: Rs Contact Us /-
- 8. Genetic linkage analysis and association studies | Fee: Rs Contact Us /-
- 9. Quantitative trait loci (QTL) mapping | Fee: Rs Contact Us /-
- 10. Visualizing genetic data using advanced software | Fee: Rs Contact Us /-
- 11. CRISPR-Cas9 and TALENs for targeted gene editing | Fee: Rs Contact Us /-
- 12. Optimization of gene editing protocols for accuracy | Fee: Rs Contact Us /-
- 13. Screening and validating edited organisms | Fee: Rs Contact Us /-
- 14. Assessing off-target effects and efficiency | Fee: Rs Contact Us /-
- 15. Applications of genome editing in genetic research | Fee: Rs Contact Us /-
- 16. RNA interference (RNAi) techniques for gene silencing | Fee: Rs Contact Us /-
- 17. Protein expression analysis and quantification | Fee: Rs Contact Us /-
- 18. Mutagenesis and knockout models in functional studies | Fee: Rs Contact Us /-

- 19. Introduction to transgenic models in genetics research | Fee: Rs Contact Us /-
- 20. Case studies on gene function and pathway analysis | Fee: Rs Contact Us /-
- 21. Analysis of genetic diversity in populations | Fee: Rs Contact Us /-
- 22. Using phylogenetic tools for evolutionary studies | Fee: Rs Contact Us /-
- 23. Genetic drift, selection, and migration analysis | Fee: Rs Contact Us /-
- 24. Hardy-Weinberg equilibrium and population structure | Fee: Rs Contact Us /-
- 25. Applications of population genetics in conservation | Fee: Rs Contact Us /-

#### Please contact on +91-7993084748 for more details

Cant Come to Hyderabad or Chennai or Bangalore? No Problem, You can do it in Virtual / Online Mode